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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/617,829

Applicant(s)

LICHANA, DANIEL DE

Examiner

MATTHEW SITTNER

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-46 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/5508)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Status of Claims

1. This action is in reply to the application filed on 07/14/2003. Claims 1-46 are currently pending and have been examined.

Information Disclosure Statement

2. No Information Disclosure Statement has been filed.

Drawings

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because numerous figures are of insufficient quality and legibility. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

The examiner requests the applicant to provide new legible drawings. Specifically, Figs. 6A - 6E, 7A - 7H, 8A - 8C, 9A - 9B, 9D, 10A - 10B all contain pictures, charts, and graphs which are either not legible, too dark to read, or both.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
6. Regarding Claims 1-3, 12-13 and 41:

“Link” and “links” are not enabled. Applicant’s disclosure at Abstract and at [0028-0031, 0033, 0035, 0045-0046, 0053, 0075, 0084, 0089, 0091-0093, 0110, 0116, 0118, 0128] of applicant’s disclosure discloses the claimed “link” and “links”. For example, at [0093] applicant defines link as follows:

As seen in FIG. 2, the framework 106 comprises a list of links. The links identify or link two or more entities, or link an entity with the physical space. The links may be direct or indirect links. For example, link 208 directly links an entity 202 to the physical space 204, but link 208 indirectly links entity 202 to physical space 204. The links may be stored in a database, a relational database, or hyperlink storage as hyperlinks. The links may be two-way and comprise text and/or symbols.

However, from applicant’s disclosure it is not clear what a link is. Fig. 2 and [0093] seem to indicate that the claimed “links” are nothing more than lines on a drawing. And the lines merely represent an abstract relationship between entities.

If applicant is actually claiming a physical link of some sort then applicant must disclose an enabling description of what a “link” is.

Applicant should provide a clear example and enabling disclosure of what a "link" is.

7. Regarding Claim 1:

"Feedback Loop" is not enabled. Applicant discloses the claimed "Feedback loop" in his disclosure at [0053, 0090, 0092, 0111]. However, applicant never enables "Feedback Loop". What is a "Feedback Loop"? Is it used to communicate information? Is it a physical apparatus or a line on a drawing? Fig. 1 shows a Feedback Loop 110 as a line connecting Framework 106 to Consumers/Customers 102. Lines on drawings are not patent eligible.

Applicant should provide a clear example and enabling disclosure of what a "Feedback Loop" is.

8. Regarding claim 13,

13. The framework of claim 1 wherein the framework comprises means for managing the links.

Managing the links is not enabled. Applicant discloses managing links in his specification at [0030, 0033, 0046, 0084, 0093]. However, as links also is not enabled applicant should provide an enabling disclosure of how one manages links. Earlier, examiner construed links as merely symbols and characters on a sheet of paper. Links may

also be construed as an abstract idea about a relationship between entities. As such, how does one manage a symbol or abstract idea?

9. Regarding claim 16,

16. The framework of claim 15 wherein the model highlights incompatible propositions with numeric imaging.

At [0097, 0108] applicant discloses “the model highlights incompatible propositions with numeric imaging.” However, applicant does not enable what this looks like or how he intends to accomplish that which he has claimed.

10. Regarding Claim 18:

18. The framework of claim 1 further comprising an operational specification chart which is created and used.

Applicant claims an operational specification chart but fails to enable a user to use the chart. How does applicant's invention create the chart? Is the chart created automatically or manually? How does a user use the chart? How would the rest of the invention be impacted if there were no chart?

11. Regarding claim 25,

25. A method for optimizing land and resource use, said method comprising the steps of:

gathering data, said data representative of human factors, economic factors and environmental factors;

qualitatively assessing said data;

quantitatively assessing said data;

developing a plan for optimal use of said land and resources, wherein said step of developing comprises determining a numerical representation or value of services, formulating a theoretical specification, and modeling said services and use of said land and resources; and

repeating said steps of gathering data, qualitatively assessing said data, quantitatively assessing said data, and developing a plan, wherein said step of repeating aids in creating an optimal land-use plan.

Applicant claims qualitatively and quantitatively assessing data. However, applicant's disclosure at [0054-0055, 0114, 0118] does not enable one of ordinary skill in the art to practice the claimed invention.

12. Regarding Claim 29,

29. The method of claim 28, wherein the step of gathering data further comprises the step of populating a balance sheet with the gathered data.

Applicant claims populating a balance sheet with gathered data. However, applicant does not enable what kind of data or what kind of balance sheet. What does the

data represent and where does it come from? Is data automatically populated to balance sheet or is it done manually?

13. Regarding Claim 34,

34. The method of claim 33, wherein said assessment grid and said evolution grid have three axis, said three axis representative of said human factors, economic factors and environmental factors.

Applicant does not enable what the grids mean or how they are to be used. It the data presented on the grid used by the model or by the user? How would a user use the information presented? What determinations should a user make? How are the grids populated with data? Is this done automatically or manually?

Claim Rejections - 35 USC § 112

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claim 23 recites the limitation "The framework of claim 1 wherein the equation ..." in the first line of Claim 23 and depending upon claim 1. There is insufficient antecedent basis for this limitation in the claim.

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16. Claim 24 recites the limitation "The framework of claim 1 wherein the equation ..." in the first line of Claim 24 and depending upon claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

17. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

18. Claims 1-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim(s) do not fall under any of the four categories of a process, machine, manufacture, or composition of matter.

19. Regarding claim 1, applicant claims a framework but defines no structure.

20. Regarding claim 2, applicant claims software only. Software must be stored on a medium. Software is merely a set of instructions (non-functional descriptive material) capable of being implemented by a computer. However, by itself without being encoded onto a statutory computer-readable medium is not realizable. See MPEP 2106.01 (I).

21. Claims 25-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Applicant claims:

25-43. *A method for optimizing land and resource use, said method comprising the steps of:*

However, as claimed any step could be performed mentally in an abstract sense. Thus, applicant's invention is a judicial exception of an abstract idea. In order for a claimed invention to a judicial exception to be patent eligible, it must satisfy one of the two tests below:

In the instant case, claims 25-43 fail the above tests. See MPEP 2106 (IV)(B)(2).

In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

22. Regarding claim 40,

40. The method of claim 25, wherein a charter is created.

A charter is an abstract legal fiction not eligible for patent.

23. Claims 44-46 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

24. Regarding claim 44, applicant claims "A computer-readable medium comprising instructions to: gather data" However, applicant merely recites Non-functional descriptive material. See MPEP 2106.01.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: (*See MPEP Ch. 2141*)

- a. Determining the scope and contents of the prior art;
- b. Ascertaining the differences between the prior art and the claims in issue;
- c. Resolving the level of ordinary skill in the pertinent art; and
- d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

26. Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Herring et al. US 4,969,114 (Herring)” in view of “Orr et al. US PGPub. 2003/0061012 (Orr)”.

27. Regarding Claim 1:

1. A framework for optimizing use of resources in a physical space comprising:

Herring discloses a method useful in land-use planning. His method defines and determines physical relationships between physical entities (e.g. number of industrial facilities located adjacent to a river). Herring at Description of Related Art at col. 1, lines 15-24; col. 5, lines 14 – 34.

links that link entities, having a relationship with a physical space, wherein the links define a relationship between two or more entities or between an entity and the physical space; and

Herring discloses a method for determining a relationship among physical entities. See Title of the Invention; Abstract; Field of the Invention at col. 1, lines 1-15; Description of Related Art at col. 1, lines 15-24; Summary of the Invention at col. 2, lines 55 - col. 4, lines 34. Herring's "relationship between physical entities" is construed as applicant's claimed "links that link entities". Further, Herring's relationships (links) mathematically define the relationships between and interconnectivity of two or more entities. See for example, Herring at col. 2, lines 63 – col. 3, lines 14.

Herring does not expressly disclose the following:

a feedback loop that allows user input or consumer feedback to be used in order to optimize one of consumer satisfaction and quality of life, in services offered or proposed to be offered to consumers located in the physical space.

However, Orr discloses what Herring does not. Like Herring, Orr also discloses a land-use planning or community planning method and system. Orr at Abstract.

Whereas Herring does not disclose a user feedback loop Orr does. Orr at [0011, 0017, 0018] discloses a model which incorporates user input, interactions, preferences and user-preferred outcomes.

Further, Orr provides a feedback mechanism which communicates information between the model and the user. Orr at [0075, 0077, 0079, 0154, 0160].

Orr's model specifically addresses such issues as quality of life [0070, 0081, 0116, 0124 – Life Quality Assessor, 0126, 0155] and various services [0114, 0118].

It would have been obvious to one of ordinary skill in the art to combine Herring with Orr as both seek to solve the problem of land-use planning. Further, each reference similarly seeks to solve that problem by employing sophisticated computer models which incorporate user inputted information and computer modeling techniques.

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of “Herring” and “Orr” as a whole to produce the invention as claimed with a reasonable expectation of achieving: the linking/relationship features of Herring with the user input and feedback features of Orr.

28. Regarding Claim 2:

2. The framework of claim 1 wherein the framework comprises software and wherein the links are stored in one of:

a database, a relational database, and hyperlink storage as hyperlinks.

Herring discloses software and storing relationship information (links) in a database. Herring at col. 2, lines 5-25.

Orr also discloses a sophisticated computer model which comprises software [0044, 0135, 0140] and databases [0066, 0158].

Further, it would be obvious to one of ordinary skill in the art to store Herring's "relationship between entities" or applicant's claimed "links" on Orr's database.

29. Regarding Claim 3:

3. The framework of claim 3 wherein the links have a bi-directional relationship.

Herring's relationship between entities (links) are construed as claimed bi-directional in that one entity is not defined relative to a single fixed point but rather entities are defined relative to multiple points and to each other. See for example Herring at Fig. 3 and col. 6.

30. Regarding Claim 4:

4. The framework of claim 1 wherein the entities comprise one or more of private entities, public entities, physical infrastructure, organization infrastructure, surrounding environs of private, and publicly owned structures.

Herring discloses physical entities at [Title; Abstract; Field of the Invention col. 1, lines 1-15; Summary of the Invention col. 2, lines 63-68].

31. Regarding Claim 5:

Herring does not expressly disclose the following:

5. The framework of claim 4 wherein physical and organization infrastructure of the entities, comprise one or more of:

buildings, equipment and other physical items as well as organizational structure, software, data, information, intellectual assets, and other intangibles.

However, Orr does. Orr discloses infrastructure at [0065, 0087 – buried infrastructure, 0087 - building height] and data at [0157 – building codes]. Further, it would be obvious to one of ordinary skill in the art to store information pertinent to land-use planning (i.e. the other claimed items) in a database.

32. Regarding Claim 6:

6. The framework of claim 1 wherein the entities relationship with the physical space comprises one or more of:

geographical, political, environmental, and/or business relationship.

Herring discloses relationships between physical (i.e. structure) and environmental entities [col. 5, lines 13-34].

Similarly, Orr discloses relationships between physical, environment [0047, 0066], and geographical [0082] entities.

33. Regarding Claim 7:

7. The framework of claim 1 wherein the physical space is one of:

land, sea, outer space, underwater, neighborhood, developed site, and undeveloped site.

Herring's physical space includes land, a developed site (i.e. industrial site), river [col. 1, lines 25-40], etc...

Likewise, Orr defines a physical space as terrestrial space [0082], undeveloped site ("preserved land") [0088].

34. Regarding Claim 8:

Herring does not expressly disclose the following:

8. The framework of claim 1 wherein the services are categorized and the framework further comprises a relational or other database to store services.

However, it would be obvious to one of ordinary skill in the art to store ancillary information such as services information which supports a physical entity in a database. Herring discloses using data bases to store information pertinent to physical entities (col. 1, lines 45-60; col. 2, lines 5-25).

While Herring may not expressly disclose storing services information in a database, Orr does. See [0070 – governmental service, 0114 – utility services, public service infrastructure, 0118 – commercial services, 0120].

35. Regarding Claim 9:

Herring does not expressly disclose the following:

9. The framework of claim 1 wherein the services comprise:

development, environment, security, information and communications, education, health care, cultural life and sport, and transportation services.

However Orr does. Orr at [0047-0048] discloses modeling health and environmental services. See also, Orr for [0065- transportation, development, environment, information, 0070 – quality of life, 0088 – development], [0114 - alternative transportation].

36. Regarding Claim 10:

Herring does not expressly disclose the following:

10. The framework of claim 1 wherein the services are characterized as human, economic, and environmental.

However Orr does. Orr at [0047, 0065-0066, 0114] discloses economic, social, and environment categories. See Orr at [0118] for commercial services.

37. Regarding Claim 11:

Herring does not expressly disclose the following:

11. The framework of claim 1 wherein the framework is used on developed sites or on undeveloped sites.

However Orr does. Orr at [0088, 0089, 0092] discloses using his method and system in conjunction with both developed sites and undeveloped sites or preserved sites.

38. Regarding Claim 12:

12. The framework of claim 1 wherein the framework identifies and defines the links.

Herring discloses apparatus and method for determining relationships among entities. Herring at Abstract and at Summary of the Invention. These features are construed as claimed “framework identifies and defines the links”. Essentially, Herring is directed at identifying, defining, quantifying, etc..., links or relationships between entities.

39. Regarding Claim 13:

13. The framework of claim 1 wherein the framework comprises means for managing the links.

Herring at Summary of the Invention discloses how the relationships are determined, analyzed, and defined using mathematical relationships. This process provides for these relationships to be recorded and sorted to be retrieved at a later time. This process is construed as claimed means for managing the links.

40. Regarding Claim 14:

14. The framework of claim 1 further comprising a theoretical specification chart wherein a theoretical specification chart is created and used.

Herring's Figs. 3-6 are construed as claimed theoretical specification chart.

41. Regarding Claim 15:

Herring does not expressly disclose the following:

15. The framework of claim 14 further comprising a model wherein the theoretical specification is compared to the present land use.

However, Orr does. Orr at [0047] discloses using the method and system to model past, present and future interactions or impacts between human and environmental entities. Thus, a theoretical specification or use can be modeled and compared to a present use.

42. Regarding Claim 16:

Herring and Orr do not expressly disclose the following:

16. The framework of claim 15 wherein the model highlights incompatible propositions with numeric imaging.

However, it would be obvious to one of ordinary skill in the art to highlight problems or alert a user to incompatible propositions as claimed. Computer models are designed to simulate scenarios and highlight in some fashion both positive and negative results.

43. Regarding Claim 17:

Herring does not expressly disclose the following:

17. The framework of claim 15 further comprising a simulator wherein a simulation is created based on the model.

However, Orr does. Orr discloses animated simulations at [0072, 0100, 0102, 0110, 0124].

44. Regarding Claim 18:

Herring and Orr do not expressly disclose the following:

18. The framework of claim 1 further comprising an operational specification chart which is created and used.

However, it would be obvious to one of ordinary skill in the art to create the claimed chart.

45. Regarding Claim 19:

Herring does not expressly disclose the following:

19. The framework of claim 1 further comprising a graphics program wherein a graphical representation is created and used.

However, Orr does. Orr discloses a Graphical User Interface at [0014, 0035, 0051, 0057, 0058, 0134].

46. Regarding Claim 20:

Herring does not expressly disclose the following:

20. The framework of claim 1 further comprising a 3D program wherein a 3D presentation is created and used.

However, Orr does. Orr at [0054, 0060, 0061, 0069, 0072, 0080, 0082, 0087, 0135] discloses presenting information in a three-dimensional presentation.

47. Regarding Claim 21:

Herring does not expressly disclose the following:

21. The framework of claim 1 further comprising a virtual reality program wherein a virtual reality presentation is used.

However, Orr does. Orr at [0054, 0136] discloses presenting information in a virtual presentation.

48. Regarding Claim 22:

Herring does not expressly disclose the following:

22. The framework of claim 1 further comprising a three dimensional wherein the three dimensional grid is used for assessment of the services and the three axes represent x=human, y=economic, z=environmental.

However Orr does. Orr at [0082] discloses displaying information in three dimensions using an x, y, and z axis. Further, it would be obvious to one of ordinary skill in the art to display information on such a three dimensional axis using a plurality of information such as claimed human factors, economic factors and environmental factors.

Orr at [0066] further discloses the value of evaluating human, economic and environmental factors and data and how they impact each other. It would be obvious to one of ordinary skill in the art to present this information in three dimensions on the x, y, z axis disclosed by Orr at [0082].

Orr at [0102] also discloses simulating scenarios involving economic, human and environmental occurrences and events.

49. Regarding Claim 23:

Herring and Orr do not expressly disclose the following:

23. The framework of claim 1 wherein the equation $A+B-C \leq A$ is used for economic evaluation wherein

A represents: the cost of existing services,

B represents: the increased cost due to improving the service or services, and

C represents: persons or entities concerned with:

- C1--economy of scale realized when the serve is implemented,
- C2--economy due to `intelligence` in maintenance and operation of the service,
- C3--qualitative increase in level and number of services,
- C4--economic fall out of these improvement, and
- C5--assurance for the operator to have a rapid return on the investment.

However, it would be obvious to one of ordinary skill to use various mathematical equations to make economic evaluations.

Although, Herring and Orr do not disclose the above claimed equation exactly they both do disclose various equations which are used by there respective models.

50. Regarding Claim 24:

24. The framework of claim 1 wherein the equation $A+B-C>A$ is used for economic evaluation.

Claim 24, has similar limitations as of Claim 23, therefore it is rejected under the same rationale as Claim 23.

51. Regarding Claim 25:

25. A method for optimizing land and resource use, said method comprising the steps of:

gathering data, said data representative of human factors, economic factors and environmental factors;

qualitatively assessing said data;

quantitatively assessing said data;

developing a plan for optimal use of said land and resources, wherein said step of developing comprises determining a numerical representation or value of services, formulating a theoretical specification, and modeling said services and use of said land and resources; and

repeating said steps of gathering data, qualitatively assessing said data, quantitatively assessing said data, and developing a plan, wherein said step of repeating aids in creating an optimal land-use plan.

Claim 25, has similar limitations as of Claim 1, therefore it is rejected under the same rationale as Claim 1.

52. Regarding Claim 26:

26. The method of claim 25, wherein the step of gathering comprises gathering customer feedback data.

Claim 26, has similar limitations as of Claim 1, therefore it is rejected under the same rationale as Claim 1.

53. Regarding Claim 27:

27. The method of claim 25, wherein the step of gathering data comprises the step of populating a chart with the gathered data.

Herring at Figs. 3-6 disclose charts populated with data.

54. Regarding Claim 28:

28. The method of claim 27, wherein the step of qualitatively assessing said data further comprises the step of assigning a value to the human factors, economic factors and environmental factors represented by said data.

Both Herring and Orr disclose assigning values to various factors. See Herring at cols. 7-8.

See Orr at [0019, 0065, 0079, 0082, 0095, 0116, 0119, 0147, 0154].

Further, it would be obvious to one of ordinary skill in the art to assign a value to the various factors which are to be modeled.

55. Regarding Claim 29:

29. The method of claim 28, wherein the step of gathering data further comprises the step of populating a balance sheet with the gathered data.

Herring at Figs. 4-6, show balance sheets populated with data.

56. Regarding Claim 30:

30. The method of claim 29, wherein the step of quantitatively assessing said data further comprises the step of performing calculations on said data to generate resultant data.

Herring discloses performing calculations at cols. 10-11.

57. Regarding Claim 31:

Herring does not expressly disclose the following:

31. The method of claim 30, further comprising the step of:
importing said data and said assigned value from said chart to an assessment grid;
importing said resultant data from said balance sheet to said assessment grid; and
displaying said assessment grid, wherein said assessment grid represents the status of said services.

However, Orr discloses both importing [0086] data and displaying [0064, 0132, 0135] information. Further, it would be obvious to one of ordinary skill in the art to both import, export and display data relevant to the model. Also, data is commonly exported to other applications (i.e. charts, balance sheets, grids, etc...).

58. Regarding Claim 32:

32. The method of claim 31, further comprising the step of:

modifying the numerical representation or value assigned to the services, thereby generating a modified value;

importing said data and said modified value from said chart to an evolution grid;

importing said resultant data from said balance sheet to said evolution grid; and

displaying said data and said modified value from said chart, and resultant data from said balance sheet, wherein said evolution grid represents the proposed status of said services.

Claim 32, has similar limitations as of Claim 31, therefore it is rejected under the same rationale as Claim 31.

59. Regarding Claim 33:

33. The method of claim 32, further comprising the step of visually displaying a virtual representation of the optimal land-use plan.

Claim 33, has similar limitations as of Claim 21, therefore it is rejected under the same rationale as Claim 21.

60. Regarding Claim 34:

34. The method of claim 33, wherein said assessment grid and said evolution grid have three axis, said three axis representative of said human factors, economic factors and environmental factors.

Claim 34, has similar limitations as of Claim 22, therefore it is rejected under the same rationale as Claim 22.

61. Regarding Claim 35:

Herring does not expressly disclose the following:

35. The method of claim 33, wherein said human factors are chosen from one of:
smart growth & sustainable development, security, health care, education, environment, transportation, cultural life & sport, and information and communication.

However, Orr does. Orr discloses human factors at [0047-0048, 0066, 0084, 0100, 0109, 0112] which may include at least the claimed health, environment, development and transportation.

62. Regarding Claim 36:

Herring does not expressly disclose the following:

36. The method of claim 33, wherein said economic factors are chosen from one of:
studies and projections cost, realization cost, cost of debt, management, maintenance and control cost, tax revenues, yield and appropriation, sales price of services, and legal and particulars.

However, Orr does. Orr discloses a Financial Assessor at [0120] which is construed as claimed economic factors. See also Orr at [0121].

63. Regarding Claim 37:

Herring does not expressly disclose the following:

37. The method of claim 33, wherein said environmental factors are chosen from one of:

water, air, noise level, soil--underground--relief, green spaces, public lighting, waste and treatment, and pollution.

However Orr does. Orr at [0047-0049, 0065, 0091, 0103, 0104, 0114, 0116] discloses environmental factors.

64. Regarding Claim 38:

38. The method of claim 25, wherein said method is implemented during one of:
conceptualization of land use, implementation of land use, management and maintenance of land use, and control of land use.

**Herring's system and method is used during planning and management phases.
Herring at col. 5, lines 12-34.**

Orr also discloses a method and system which is intended to be used at all stages of development and planning (past, present and future). Orr at Abstract.

65. Regarding Claim 39:

Herring does not expressly disclose the following:

39. The method of claim 38, wherein the step of developing is performed during one of:

conceptualization of land use, implementation of land use, management and maintenance of land use, and control of land use.

However, Orr does. Orr discloses developing a plan for land use at all stages (past, present and future). Orr at abstract [0088, 0089, 0095, 0157].

66. Regarding Claim 40:

Herring and Orr do not expressly disclose the following:

40. The method of claim 25, wherein a charter is created.

However, it would be obvious to one of ordinary skill to produce a printed document such as a charter. A charter is nothing more than a contract or abstract legal idea.

67. Regarding Claim 41:

41. The method of claim 25, wherein the proposed services are linked together in a network of links and the links are managed.

Claim 41, has similar limitations as of Claim 13, therefore it is rejected under the same rationale as Claim 13.

68. Regarding Claim 42:

Herring does not expressly disclose the following:

42. The method of claim 25, wherein said proposed services are chosen from one of:
a bridge, a river, a street, streetlights, apartments, TV channels, agriculture, public health, a building, a city hall, the state, sports, a book, a field, offices, cattle, a forest, air and water quality, noise, a factory, a coast, and a hill.

However Orr does. Orr discloses the following claimed services:

Quality of life – [0006, 0070];

Water – [0006, 0047, 0070, 0087, 0091, 0095, 0103, 0104, 0109, 0113];

Forest – [0047];

Health – [0047];

Street – [0065];

Air – [0065, 0087, 0114];

Building – [0087, 0103];

See also, Orr at [0124] for Life Quality Assessor.

The remaining factors would be obvious to one of ordinary skill in the art.

69. Regarding Claim 43:

43. The method of claim 25, wherein said step of developing a plan for optimal use of said land and resources, further includes the step of performing an economic selection by use of the equation $A+B-C \leq A$, wherein

A represents: the cost of existing services,

B represents: the increased cost due to improving the service or services, and

C represents: persons or entities concerned with:

C1--economy of scale realized when the serve is implemented,

C2--economy due to 'intelligence' in maintenance and operation of the service,

C3--qualitative increase in level and number of services,

C4--economic fall out of these improvement, and

C5--assurance for the operator to have a rapid return on the investment.

Claim 43, has similar limitations as of Claim 23, therefore it is rejected under the same rationale as Claim 23.

70. Regarding Claim 44:

44. A computer-readable medium comprising instructions to:
gather data, said data representative of human factors, economic factors and environmental factors;
qualitatively assess said data;
quantitatively assess said data;

develop a plan for optimal use of land and resources, wherein the instructions to develop a plan comprise instructions for determining a numerical representation or value of services, formulating a theoretical specification, and modeling said services and use of said land and resources; and

repeat instructions to gather data, qualitatively assess said data, quantitatively assess said data, and develop a plan, wherein said repeat instructions aids in creating an optimal land-use plan.

Claim 44, has similar limitations as of Claim 1, therefore it is rejected under the same rationale as Claim 1.

71. Regarding Claim 45:

45. The computer-readable medium of claim 44, wherein the instructions to gather data comprise gathering customer feedback data.

Claim 45, has similar limitations as of Claim 1, therefore it is rejected under the same rationale as Claim 1.

72. Regarding Claim 46:

46. The computer-readable medium of claim 44, further comprising instructions to display the optimal land-use plan.

Orr at [0064, 0132, 0135, 0136] provides a means to display information including a land-use model.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW T. SITTNER whose telephone number is (571) 270-7137. The examiner can normally be reached on Monday-Friday, 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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